

>> PLIZGA: Good afternoon, everyone, and welcome to the Basic Skills Webinar. My name is Stacey Plizga, and I will be moderating your event today. I would like to introduce to you Stan Koutstaal. Stan is the Program Manager for the HPOG Program.

Over to you, Stan.

>>KOUTSTAAL: Thanks so much, Stacey.

Good afternoon, everyone. It's my pleasure to welcome you today to this webinar provided by the Health Profession Opportunity Grants Program on Adult Basic Skills Education.

Low reading and math skills represent a principal barrier to HPOG recruitment and to participants' success in occupational training, college prerequisite courses, and other credit courses. This means that low reading and math skills are also a barrier to securing employment that leads to great self-sufficiency.

So the question is: What's the best way to help individuals with low reading and math skills? Today we are joined by colleagues from the Department of Education and ABT Associates to help answer this question. I know that many of the people on this call today are drafting applications in response to the HPOG's Funding Opportunity Announcement that has been posted and is open until May 29th. The Funding Opportunity Announcement describes a process for answering any questions that you have about it.

We won't be addressing questions about the Funding Opportunity Announcement today. But I can say that our vision is that HPOG programs provide innovative approaches to basic skills in education, based on the best available evidence, so that lower-skilled individuals can enroll in the program and will go on to enter and complete postsecondary training. I hope that you find that today's webinar is helpful and informative in progressing toward that vision.

With that, I'd like to turn it over to Meredith Larson to tell us a little bit more about what we know about the state of literacy in the United States and some emerging strategies.

>>LARSON: Good afternoon, this is Meredith. Thank you for joining us.

I am a Research Analyst and Program Officer for Postsecondary and Adult Education at the U.S. Informative Education Institute of Education Sciences. With me today is Heidi.

Heidi, would you like to introduce yourself real quickly?

>>SILVER-PACUILLA: Hello, this is Heidi Silver-Pacuilla. I'm a Team Leader in the Office of Career, Technical, and Adult Education also at the U.S. Department of Education.

>>LARSON: We're going to share this presentation, and I'm going to start off with a short story. In order to help you understand the task that you will have before you when you're designing and implementing programs for adults, I'd like to start today's conversation by setting the context with a little story about who we are as Americans.

Many people may have an image in their mind of who it is that needs adult education services and what these services include. Many of these images may be flattering, and some may be accurate. But by and large, most people don't really know what the full scope of the situation is or what the true complexity of the problem is. So being a good scientist, I'm going to rely on data to paint you the picture.

The most recent data we have comes from an international assessment of 23 different OECD-developed nations. This assessment tested adults 16 to 65 years old in three areas: literacy, numeracy, and problem solving in technology-rich environments. I'm just going to call it problem solving henceforth. The assessment looked at practical skills, like people's ability to calculate the cost of a car rental and not so much at people's ability to recall specific school-like facts, such as how to calculate the area of a triangle.

What did the assessment find? Well, overall the U.S. was below the international average across all domains for all age groups, so that's 60% of us. Looking more specifically at some of the skills, let's start with literacy. For literacy and numeracy, there were five different skill levels and a Level 0. Level 3 was considered sort of the average set of skills an adult should have. The U.S., like most other developed nations, had about the same percent of adults in the highest levels. For literacy, this is about 12% of the population. However, 52% of the population scored below average, at Level 2 or lower.

So looking at the adults that scored at Level 1 and Level 0, we're talking about 36 million adults. So one in six of us has difficulty reading anything more than just a short text. People performing at this level can read short text and find main ideas and maybe do some low-level basic inferences, but they've struggled to integrate to text or to draw more complex inferences; for example, what to do given a list of requirements. With numeracy, the situation is even worse. Again, we have about the same average at the high end. But we have so many people in the lowest levels that overall, as a nation, we're suffering.

Looking at the Level 1 and Level 0, we're talking about 30% of the population – that's about 58 million U.S. adults – scored below Level 2. People at this level can do very simple math tasks, such as sorting and basic arithmetic. So they could, for example, figure out how many boxes they would need to have in order to hold 100 candles if each box holds 35 candles. But they couldn't compute how much a sales person should charge her company for car rental, including mileage and its rate with per diem and expenses. This type of multistep arithmetic problems would likely prove to be too difficult.

Looking at problem solving, we had only three levels of performance plus zero, with Level 2

being considered average. Here we found that over 60%, or about 60%, were below average. People scoring, again, at those very low levels, which constitutes about 30% of the population, would have difficulty sorting e-mails into predefined folders. Other tasks, such as navigating across multiple Web pages, organizing data into spreadsheets, or figuring out how to return an online purchase, might prove overwhelming.

So just to take on some stereotypes head on, most of the people in these lower bands were employed. About two-thirds had a high school education or equivalent. And about two-thirds, again, were American born -- so this isn't just a matter of immigrants or people who didn't finish school or who aren't participating in the broader community.

Nor is it just the older generation, who may have forgotten or who may not have had access to formal schooling. It is across all age groups. So contrary to what some people may believe, this is not an isolated problem. Low skills is not an abnormality or some bizarre thing. In fact, most Americans could benefit from additional time and resources to learn; but most Americans aren't able to find services for a multitude of reasons including busy work lives, family responsibilities, confusing bureaucracies. And the students that end up in your programs are, in fact, going to be different not because they need you but rather because they can find you and they have you. And because you want to help them, we want to help you.

So where do we suggest you turn for resources? There are many things out there. There are journals, there are theories, Chat rooms; and it can be hard to navigate. So I'm just going to focus on a few major points, including a couple things that really inform a lot of adult education theories and then some research findings from cognitive science and psychology.

Malcolm Knowles is probably the best known adult learning theorist, and he proposed a few characteristics of adults that have permeated the way adult education has been structured. As I go through these, consider how they apply to your learning needs and also how you could structure your programs and resources based on some of these things.

The first thing that Malcolm noted was that adults are more independent and self-directed than younger learners. Adults also have a very rich set of life experiences to draw upon, and this can both be a help and a hindrance. Adults want to learn things that are immediately relevant to their social lives and to their jobs. They want to have knowledge that they can apply. It needs to be useful information. They also need to know why it is that they're learning things, why they're doing things. So having that relevance apparent is very helpful.

And finally, adults have a wide array of internal incentives. And these internal incentives can be great things for programs to leverage in order to get people in and then also to have them stay in a program. So looking at some of these internal incentives, here are some of the reasons why adults will be coming to your programs and why they may be staying.

Adults enter into education programs and stay because of the social relationships they have. They may be there because their boss told them to be or because there is some legislation or

some rule for them to comply to. They are there because they want to help their community. They're there because they want to improve themselves. They can also come and stay because they're trying to avoid being bored or just because they're curious, so each of these can feed into someone's use of a program.

Let's move on to some strategies that you can implement.

Go ahead to the next slide.

Here are a few strategies that have come up time and time again in research. They've been tested with postsecondary students and students in the K-12 system. These have not been tested with adults with low skills, so I can't say for sure that these would work. There isn't a lot of research on that specific population, but these seem to help all learners. And they have the added benefit of being cheap or free and somewhat easy to implement.

The first one is called interleaving and delay. And the idea here is that students learn best when they receive variety and they take breaks. So you want to encourage students to pause, come back to material, check on what they're learning. You want to mix up examples of question types. So you'd have multiplication, division, and fractions all jumbled up together. You would want to use this because it requires that students retrieve things from memory and elaborate and think more deeply on their own. Plus, it just keeps everything more interesting for you and for them.

The next is explanatory questioning, and there are two broad types. One is elaborative interrogation, where students ask themselves questions and provide themselves answers. The other is self-explanation. This is when students explain to themselves why certain points are true.

Now, doing these things may require some initial modeling and encouragement; it's kind of awkward. But if you explain to your students why you're doing this, it will help motivate them. And ultimately what this does is it helps them to, again, think more critically and more deeply and really integrate it into their life experiences.

The next example is frequent quizzing. Most of the common study approaches – like highlighting and rereading – are not as beneficial to students as low-stake quizzes. And part of the reason here is that people tend to learn better from mistakes and from realizing that they don't know something. So having low-stake frequent quizzes can actually help them to, again, retrieve things from memory and figure out what it is that they don't know so that they can adjust their strategies accordingly.

The final thing that we encourage is that you address the students' maladaptive beliefs and attributions and mindsets head on. Many students have negative experiences or heightened anxiety around school, or cultural stereotypes and biases may affect their perceptions of their own abilities. As a program, you can address these and help them to realize that their intellects

can grow, that their skills can develop. And by changing these perceptions, you can set them on a recursive positive education path.

And with that, I'm going to turn it over to Heidi.

>>SILVER-PACUILLA:Thank you, Meredith.

I'm going to pick it up from here and talk briefly about what instruction might look like that takes into account the research Meredith just described, and give you some signposts that you can use to check your own teaching.

So, three words here: Is the learning in your classroom active, deep, and social? By active, I'm talking about learning that is hands-on -- such as authentic, project-based, and problem-based learning; lab work that requires students to experiment and learn through trial and error; Web-based simulations; content creation; peer tutoring; and internships. And I know that HPOG's Career Pathways utilizes all of these active learning strategies. These strategies help students take ownership and apply their knowledge.

By going deep, I'm talking about learning that requires that students identify a component of a topic that is particularly and intensely interesting to them and then engage in a sustained inquiry with a goal of knowing the subject well enough to be able to transfer knowledge to a new situation and to teach it to others.

So a way that you might work this into your classroom is organizing group work as a jigsaw model, which can provide the time students need to focus on this kind of learning. Another model is peer teachback that helps students articulate their learning to others.

By social, I'm talking here about blended and interactive teaching models, which include dialog with peers, facilitators, mentors, coaches, and learning communities, which can be online or face-to-face. These activities in a social environment require students to articulate their thinking in their own words and voice.

Four more words here -- terms -- is the learning in your classroom personalized and contextualized with time for trial and error and practice? Personalized learning is designed and customized for the individual through learning analytics and diagnostic assessments to remediate specific gaps and also to accelerate where the student is strong. It does not have to imply that the student is learning independently in a workbook or being alone.

When academic learning is contextualized, it's tied to something immediately relevant to the student, such as a problem or a project or to occupational training and internships. So HOPG Career Pathways are excellent environments to apply academics and internships and practicums, and vice versa, and then to talk about it.

Adults learn through trial and error, just as children do. And especially for students whose strengths are not learning through print-based sources or struggling students, trial and error and active learning are key to understanding and remembering the material.

Practice, our last word here, is absolutely essential to learn new skills to a level of fluency. There are no shortcuts. To move a skill out of working memory, where you're still talking yourself through every step, out of working memory and into fluency, it simply has to be practiced dozens of times. Help students understand how their brain works and why practice of isolated skills is so important.

This slide presents several practitioner-friendly resources that could provide you with more context for what Meredith and I have just shared. They're all freely available, and links to them are at the end of the presentation. I'm simply going to introduce them to you in sort of a Reading Rainbow format.

Starting at the left, Education for Life and Work -- this is a brief that summarizes a book by the National Academies of Science that looked at how to teach and learn 21st Century competencies, which they discuss as cognitive, interpersonal and intrapersonal knowledge and skills. Sometimes these latter two skills are called non-cognitive skills or more popular recently as grit.

The brief opens with this statement: "Research shows that problem-solving, critical thinking, and other 21st Century skills are best developed in the context of teaching and learning academic subjects." What a great reminder for us that what's happening in the classroom is so important to what's worked for success. The brief is a great source of information on the topic of deeper learning.

Moving toward the right, Supporting Learning and Motivation is a three-part booklet drawn out of the larger book-length report called Improving Adult Literacy Instruction, also from the National Academies. This short brief speaks to instructional designs that are supportive, ways to build intrinsic motivation and persistence, and technology features that support the pedagogies.

Also at the bottom, Fueling the Race, the one with the diplomas -- this is a report on 62,000 students at 48 institutions in a multiyear study of credits awarded for skills and knowledge, what's called prior learning assessments or PLA. The study found that PLA students had better academic outcomes -- particularly, higher graduation rates and took less time to degree. So honoring and giving credit to what students already know is a huge boost and a real concrete way to personalize their trajectory. So if your institution is not doing that now, you might think about how you could start awarding some credits.

Student Voice, the practitioner brief in the center at the top -- I'm going to show you a graphic from this one next. As you can imagine, voice is a strongly-related theme to many of our key learning terms. This one is a great read, very approachable; and it's guaranteed to make you think about how you're managing and running your class or program.

And the last one at the top right is from the Stanford Center for Opportunity Policy in Education. It has very practical suggestions about how to use technology to support struggling learners, and we're going to go into that in more detail. Again, a very approachable read and something you may want to share with your administrators.

Next slide, please.

Now, this graphic, as I said, is from students at the Center; and it's a graphic that shows a continuum of ways that teachers can give their students voice and ownership of their own learning. So from left to right, more responsibility is transferred to the students; and they have more opportunities to grow in their self-directedness, confidence, critical thinking, and self-advocacy. These are such important skills for workforce success. And this report provides some ways that you can make opportunities to develop these skills in your classrooms, clinicals, and internships.

And I just want to pause here for a second and say so many of us stick on the left side, where we have students raise their hands and say who is interested; or we may ask, "What do you want to do tomorrow?" But we rarely make it all the way to the right side, where students are taking leadership. So I challenge us all to do that more often.

So just as important as teachers and classroom experiences are, the experiences students have outside of the classroom are so important as well. I'm going to take a moment to talk about the role technology can play in our adult students' learning and why you may want to consider establishing a one-on-one computing environment, in which each student has his or her own personal device.

The website I'm showing here is www.EveryoneOn.org. And I want to talk about how the same learning factors we've just been discussing are important that students have their own device and constant and reliable Internet access. With your own device, your learning is more active; it's more frequent, happening more often; you can go off on tangents and go deeper when you're not on a timed library computer. You can bring your social life into your learning when you have a way to carry around your social network. And you can be a more active participant in the online forums that are increasingly part of college classes.

An owned device helps you personalize your experience, organizing files and pathways to better suit your cognitive schema or your taste in colors and patterns. It also allows our low-income students the trial and error and practice time that they most likely did not get as children. Our adult students coming into college are often far behind in comfort level with technology because they simply haven't logged the hours in trial and error learning that their peers have.

So in order to build that student mindset and help students gain the comfort and proficiency with computers to use them as productivity tools, we need to be looking at ways to connect them with their own devices and home Internet. EveryoneOn.org is a national broker of low-cost

Internet service and refurbished devices. If the service providers they work with are providing service in your area, they may be able to help.

Families in 14,000 predefined low-income zip codes are automatically qualified for the lowest-cost service available, which is usually \$10 a month, plus a wireless router, a one-time cost of about \$40. There may be municipal or statewide efforts in your area as well to connect students and families to low-cost Internet. So ask around; see who is doing what; and help your students get connected. It's an important piece of the college student success puzzle.

The next slide is the resources link that we've discussed. I encourage you to look at these. And with that, I'm going to turn it over to Julie Strawn.

>>STRAWN: Thanks, Heidi.

Good afternoon, everyone. I'd like to suggest there are two main groups who could benefit from innovative basic skills strategies in Career Pathway programs, such as HPOG. One group lacks the skills to get access to even entry-level training. Adopting innovative basic skills strategies to them could help programs recruit and serve a wide array of individuals and their communities, including TANF recipients, who are a key target population for HPOG. About 40% of TANF recipients lack a high school diploma, and many others appear to have low skills despite having finished high school.

The second group who could benefit are those whose skills are sufficient to get access to and succeed in entry-level training, but not high enough for intermediate and advanced level health care programs. For example, almost all current HPOG participants have a high school diploma and higher than eighth grade reading and math skills. Early HPOG outcomes suggest that generally they can participate in and complete entry-level training. However, they may get stuck farther up the career ladder; for example, in college prerequisites for health care programs. Adopting innovative basic skills strategies for this group could enable them to earn higher level health care credentials and qualify for better-paying jobs.

So if these two groups of Career Pathways participants could benefit from more basic skills help, why not just refer them to existing services? The answer, as research by the Community College Research Center shows, is that long traditional basic skill sequences result in way too many students falling out of college and career pathways over time. In addition, we do a poor job of identifying who needs basic skills help, especially for those students who score near a cut score on college placement tests. For example, one study found that one in every three students assigned to developmental English, and one in every four students assigned to developmental math, were severely misplaced.

This figure from CCRC's research illustrates the problem. In a large study of students assigned to three or more levels of developmental math, only about 1 in 10 had successfully completed any college-level math after three years. More than one-fourth never enrolled in even the first

developmental math course. As you can see, at each step along the way, some students choose not to enroll – the percentages along the top – while others enroll but don't pass, the percentages along the bottom. And these two effects accumulate over the length of the pathway with devastating results.

While the picture is better for developmental reading, still less than one in three students makes it past that first gatekeeper college course. Research on adult education students suggests similarly severe problems with attrition.

So what might work better? Well, there isn't much rigorous research. The best evidence we have points toward the importance of three program design strategies: acceleration, contextualization, and concurrent or dual enrollment. Some of the most promising approaches combine all three. I'm going to quickly touch on each of these strategies and share two illustrative examples. I've included links to resources at the end if you want to learn more.

Acceleration strategies can include offering more hours of class time each week. For example, a fast-track GED class may meet for 15 or 20 hours a week, as compared to a more typical 4 to 8 hours. Alternatively, programs can accelerate basic skill students by mainstreaming those who test relatively close to a cutoff score straight into college gatekeeper courses or training and providing them with extra academic support.

A third acceleration approach is to redesign curricula to collapse multiple semesters of basic skills courses into a single semester and align content better with students' particular college or career pathways. In some models, students who complete the accelerated course can go directly on without retesting. Several of the California acceleration projects colleges have adopted this approach and appear to have increased completion most for the lower-skilled students, primarily through changes in instruction.

Contextualization strategies can take many forms too. For example, at lower levels of adult education and ESL, basic skills may be contextualized to introduce students to health care careers, concepts, and vocabularies. Typically, these serve students with around fourth- to sixth-grade level skills and those at ESL Levels 1 and 2.

At somewhat higher academic and English proficiency levels, programs can contextualize basic skills content to a specific postsecondary education or training course in a health care path (audio break). The goal of this contextualization is to increase relevance, retention, and align student outcomes with what it takes to succeed in the next level of education and training.

Finally, concurrent or dual enrollment strategies deliver basic skills and postsecondary level education and training simultaneously. In some models, two courses are paired together with content and instruction coordinated but taught separately. In other models, basic skills content is integrated into the postsecondary course. And sometimes a model combines both of these approaches.

The best known example of this is Washington State's Integrated Basic Education and Skills Training model, or IBEST, which a number of other places are replicating. Washington has now extended the model up to more advanced education and training, with the goal of providing students integrated basic skills instruction all along a college or career pathway.

I'd like to share a couple of examples now of how these strategies can be applied in health care career pathways to the two groups I mentioned earlier, those who are often shut out of training due to low skills or limited English and those who are held back by under preparation farther up the career ladder.

This first example from Carreras en Salud, a 10-year-old CBO community college partnership in Chicago, shows how innovative basic skills strategies can support access and success for both of these groups along the same pathway. For individuals in that first group who test into the lowest two levels of BSL have only fifth- or sixth-grade level skills and may not have a high school diploma, Carreras offers ESL contextualized to health care careers generally, including health care vocabulary terms. In a traditional program, someone with such limited English language and basic skills could have to complete five or more levels of ESL, plus additional adult or developmental education classes before being able to enter health care education and training.

Students who come to the program with somewhat higher skills or who complete that first bridge can enter the next step, an ESL class that teaches CNA-specific skills, and then on to the college of CNA exam preparation class. In every bridge in the pathway, ESL classes are intensive, meeting 16 hours a week.

For the second group, those whose skills hold them back from higher level health care education and training, Carreras offers two levels of a pre-LPN bridge. Pre-LPN Level A focuses on preparation for certification in EKG and phlebotomy so that students can qualify for patient care technician jobs at that point or continue on.

The second level, pre-LPN Level B, contextualizes ESL and academic skills to the prerequisite students will have to pass to enter the LPN program, such as biology, math, and physiology. A customized GED class is also available for students who haven't finished high school.

Carreras continues to support student success on through the LPN and RN degree programs. The effectiveness of this program is being rigorously studied through the Pathways for Advancing Careers and Education Demonstration, or PACE Project, which is a project of ACF Office of Planning, Research and Evaluation.

The second example I'd like to share is from Wisconsin. Madison College's Patient Care Pathway targets that higher level group in need of basic skills help by concurrently enrolling them in contextualized developmental education and a gateway course in a health care pathway.

I'd like you to focus for a moment on the Patient Care 2 block of classes in the center of this pathway diagram. Patient Care 2 combines chemistry, applied math for chemistry, and written communication for health care. For example, in the communication class, students may write patient incident reports. Math and chemistry teachers coordinate instruction closely, synchronize topics, and flag problems students may be having. Math is contextualized to what students need to succeed in the chemistry class.

When students complete Patient Care 2, they automatically meet the admission's requirements for all of the college's health programs without being required to retest on the compass. The Patient Care Pathway program also provides a range of support services to encourage students to complete classes, address issues they may face, and plan for the future. This program too is being evaluated as part of OPRE's PACE demonstration.

I'd like to just leave you here with some final slides for future reference. These include some considerations for career pathway program designs that address basic skill needs and resources for planning your own basic skills innovations.

Thank you.

>>PLIZGA: Thank you very much, Julie, Heidi, and Meredith.

For the remainder of our time today, our presenters will be taking your questions. So let's do a quick review of how to ask a question. Remember, send your question in via the Q&A. First, you need to open your Q&A window by clicking on the Q&A icon at the top right of your screen. When your Q&A window opens, it automatically defaults to All Panelists. Go ahead and type your question into the Text box and then hit Send.

At this time, if you have a question, go ahead and send it in. And while the questions are being sent in, I would just like to let everyone know that you will be notified via e-mail when the webinar materials are available after the webinar. So be expecting an e-mail that will announce to you when the webinar materials are available.

All right, I do have a question that came in. And I'm going to go ahead and read that and then have our presenters respond. The question is: How can some of these strategies be applied to a short, 2- to 3-hour, one-time workshop for adult learners on a very specific topic; for example, how to access vocational and educational training programs? Are there resources that you can recommend on how to apply these ideas to a short-term workshop setting?

>>SILVER-PACUILLA: I'll take the first stab at that; this is Heidi. Thank you for the question. It's a good challenge to start off with. I think you could go back through those seven terms that I mentioned and try and weave in some ways that the learning in the workshop could be active, could be social. You might have people turn to each other, introduce themselves, and state why

they're here or one thing they will take away from the workshop to get some social in there, to get some active in there.

If you're teaching something that's a specific skill, you might spend seven minutes practicing. Have people practice in groups so you've got some social going on. I think that the shorter the time frame we give ourselves as teachers, the more percent we want to use for ourselves. And we want to be sure we cram as much in as we can. And it's not successful. Students don't remember.

So if you look at that time frame that you have, two hours, and break down some opportunities for students to start to digest what you're trying to give them and to think about it and to look something up and bookmark it on their phone or their devices or in some way work in those active learning strategies, I think you will find that they remember it better and that they may be able to follow up on it a little bit better.

I'll let Julie and Meredith have a turn.

>>LARSON: This is Meredith. I really can't think of any better examples than what Heidi just covered. I think that really gives a nice place to start.

>>PLIZGA: All right, thank you, Heidi and Meredith.

We do have another question that came in, and the question is: What do the example programs – IBEST, et cetera – use for recruitment and tracking students on whether or not they completed the course or got a job?

>>STRAWN: This is Julie. On recruitment strategies, I'm not entirely sure. It could be that IBEST programs recruit from the general adult education population in those colleges because in Washington State, adult education is delivered by the community college system. And IBEST programs exist in parallel along with traditional adult education classes. I believe in some cases they have also recruited from students who have enrolled in career and technical education programs at the college but are struggling. And so they may not have come in as basic skills students. But if the technical instructors can see that they need that extra basic skills help and so refer them to IBEST.

In terms of tracking, Washington State has very good administrative data on its community college students. And because both adult education and career technical education are delivered by the colleges, they're easily able to track progress in both of those domains for their students. And for the adult education students in IBEST, they have to meet all of the regular NRS reporting on outcomes for basic skills level gains. For example, as well as having to meet learning outcomes for the regular career of technical educational, students have to meet on

technical outcomes.

I'm not sure if that answers your question, but hopefully it does.

>>PLIZGA: Okay, thank you, Julie.

The next question we have: At the start, you stressed that most of the students who could benefit from these programs aren't hearing about them. Do you have suggestions for how we reach beyond our community college ESL/A populations?

>>SILVER-PACUILLA: I'll take that one. This is Heidi. Recruitment is a challenge that we face in adult education all the time as well. And there are several questions here about time commitment during a week and also over the course of a semester. Recruitment is a challenge. I think that we need to think about flexible scheduling for some of our students so we're not stuck with the 16-week semester. That requires a lot of change at your college, but it may be something worth thinking about if you've got a pipeline that's as leaky as the one that Julie shared – Internet Graphic – as students are falling out, and they're not achieving their degrees.

Some colleges have had success with accelerated programs, bridge programs, modularized programs, that don't require 16 weeks of such a full commitment.

The other thing to think about is blended and hybrid models, where some of the learning is online, asynchronously, so that students can do it before or after work that they have to go to. Or if they're rural and they can't travel, if you can give people something to work that will advance them that is not requiring them so much drive time, I think that's also a possibility.

There is a lot of online learning that's going on in basic skills that you might want to work in as practice and supplemental, and make sure that students know about those sites right from day one so they can start self-studying and start getting in the groove of self-studying.

And I think that students are our best word-of-mouth recruiters. They live in the communities that we're trying to recruit from. So how do we turn our students into ambassadors for the programs? I think we often don't ask them to do that, and we could empower them with the talking points to recruit their friends and neighbors.

>>STRAWN: One other source I'd like to mention is working with local employers to recruit from existing health care workers in entry-level jobs. For example, there are some interesting initiatives where even food service and janitorial staff are recruited into health care pathways and supported by hospitals and other employers to start improving their skills, moving into the kinds of technical training that can allow them to stay with the same employer but qualify for higher-paying jobs.

Long-term care facilities have sometimes also been good partners on career pathways and been a good referral source because they're interested in retaining their employees, reducing turnover, improving the quality of care, and so sometimes are willing to work with a training provider to schedule classes, programs, shifts, and things like that to help support incumbent worker participation and education and training.

And as Heidi and Meredith said earlier, we know that about two-thirds of those with low skills are working. So many of those at the very lowest levels in the health care industry do and could, in fact, benefit from a program like HPOG.

>>KOUTSTAAL: This is Stan. The other thing that I would add is to consider partners, along the lines of what Julie was already talking about – partners that are serving the population that you would also like to serve. Julie in the beginning of her presentation talked about a high proportion of TANF recipients who haven't completed a high school education. Certainly, it would be possible to work with the TANF agency to identify those that might benefit from an adult basic skills education program.

Similarly, sometimes there are refugee programs, as an example of people that may not have high levels of English language proficiency and could benefit from these kinds of programs -- so just to be considering partners that are already working with the kinds of folks that could benefit from this kind of program.

>>PLIZGA: Thank you, Meredith, Julie, and Stan.

Our next question is: How do you successfully staff programs that incorporate basic skills and health care?

>>LARSON: This is Meredith, and I think I'm unmuted. Maybe Julie knows more. I have not seen a definitive way of doing this. But I can tell you that from the research that I know of, it is very hard to do well. One of the problems that faces programs like IBEST is that they often rely on dual teaching models, where you have somebody who is a health care expert for example and then maybe like a reading instructor. And having two people try and instruct the group and teach can be very time consuming and very expensive to do. But that tends to be the typical model that I've seen -- is trying to coordinate two teachers.

The other option is to really focus on somebody who has great familiarity within the field that you're teaching in -- for you, it would be health care -- and then providing them professional development to teach things along the lines of literacy or numeracy.

Julie, do you know of anything more than that? I just know that it is a very difficult thing to do

well.

>>STRAWN: What I would suggest is that you do, in fact, need both the career technical education and the basic skills side of the equation involved. And you need instructors from both sides involved because it's unrealistic to think that the basic skills instructor is going to have the technical knowledge – at least at the higher levels in the pathway. Maybe not the introduction to health care part, they can probably do that. But at the higher levels, it's unrealistic to think that they're going to have the technical knowledge required to really do this kind of a model.

And at the same time, career technical education faculty often find that they benefit from working with an adult developmental ed instructor who really understands strategies for helping lower-skill adults learn.

I don't think though that at this point most of the programs that are replicating these kinds of bridges in integrated courses are using team teaching. I think that is actually a minority of the programs. The two examples that I presented are not using team teaching. So if you think about a community college, where developmental education courses are already being offered, health care technical programs are already being offered, the extra work that's required is to contextualize the basic skills side to the health care training course. And some additional planning and coordination time between the two instructors. But it's not an enormous cost above and beyond what colleges are already doing because it doesn't involve two instructors in the same class at the same time.

So I hope that helps. But I think that is the more typical way that this model is being implemented now.

>>PLIZGA: Thank you, Julie and Meredith.

The next question we have today is: How large are these career pathway programs; that is, how many students do they serve at a time?

>>KOUTSTAAL: This is Stan. I'll answer that question just from the HPOG's experience. The number of people served by our grantees has varied quite widely. And one of the things that we're cautious about is prescribing a particular ideal number, but rather designing and planning for a program where you can reasonably serve the number of people that you project serving.

So in some places, that might be 100 people; in another place, it could be hundreds. So it really varies a lot, and it depends a lot on the resources available and the capacity of the organization to serve people well.

>>PLIZGA: Thank you, Stan.

The next question of today is – oh, and I would like to mention before I say that, we have approximately four minutes left. So this very well may be our last question. And the question is: Does anyone know of career pathway models for rural areas where it is sometimes difficult to form a cohort?

>>SILVER-PACUILLA: This is Heidi. And I will say that there is another comment in the Q&A about someone in a similar situation using video conferencing. There is also a nice model that's being run out of Pines Technical College in Minnesota. It's written up on the www.DigitalPromise.org website as a beacon site. They have video conferencing that they're using to remote employees to learn at the jobsite on their own devices and connecting people that way so that they're not having to drive to the college. Pines Tech is not a health care, but it's the same issue of how do you connect people over distance. And of course, technology has to be involved.

Video conferencing has improved greatly; and you can, of course, get free stuff like Skype. And it's great to bring people face-to-face part of the time. But I think you'll find that if you bring people together virtually or face-to-face even one or two times, the online discussion boards and forums and such can really carry you a long way and help build the cohort. It doesn't have to be an in-person cohort the whole length of the semester.

>>STRAWN: Yes, and I've come across some models that use a combination of remote instruction of mobile learning labs that have the technical equipment needed for a career pathway course. And then an instructor who travels some of the time so that, say if the class meets three times in a week, maybe two of those are remote; and the third time is the day that instructor is in that rural area perhaps with the remote lab. So that's another way to think about it – is sort of a combination of remote and face-to-face, as Heidi was suggesting.

But I appreciate the problem that even with all of those tools, getting enough people to make up a class can be difficult, although perhaps it can join a larger cohort remotely and make it work that way.

>>PLIZGA: Thank you, Julie.

I'd like to say that we have a whole bunch more fabulous questions from our audience. So I'd like to thank you for sending those in, and we apologize that we did not have enough time to get to all of them. But in addition to the ones that we have here, if you have additional questions, please go ahead and send them to hpog@ProviderResources.com, and we will get back to you with answers for these questions. So thank you very much.

When you exit out of today's webinar, an evaluation will automatically open. Please take a couple of minutes to complete the evaluation of today's session. It will greatly help us in planning for future technology-based events for you.

We would like to thank everyone for your participation in today's event, and have a wonderful day. Bye-bye.